

EVIDENCE TO ROYAL SOCIETY OF EDINBURGH INQUIRY ON ENERGY ISSUES

ABERDEEN RENEWABLE ENERGY GROUP (AREG)

Introduction

The Aberdeen Renewable Energy Group (AREG) is a public-private organisation established to promote the development of renewable energy in Aberdeen and the surrounding region of Aberdeenshire. Its directors include the leaders of Aberdeen City Council and Aberdeenshire Council, senior representatives of Aberdeen's two universities, and elected representatives from AREG's 70 member companies. AREG's objectives include:

- (a) to reinforce Aberdeen's role as a Global Energy City;
- (b) to assist the economic development of the City and region through diversification into the renewable sector, so maintaining and creating employment;
- (c) to deploy Aberdeen's considerable expertise in energy industries in support of the Scottish Executive's targets on renewable energy, so delivering environmental benefits and promoting Aberdeen as an environmentally aware city/region;
- (d) to deliver significant economic value for Scotland
- (e) to facilitate renewables growth through a wide range of activities, promotion and communications – to a wide range of audiences, including the energy industry, local communities, schools, academia, small and large businesses, and the general public.

The funding of AREG activities is carried out through the Scottish Executive's Cities Growth Fund.

AREG projects

In addition to its activities to provide information to its membership, AREG is developing a number of flagship projects to reinforce Aberdeen's position on renewable energy. These include the following:

- (a) ***Aberdeen Offshore Wind Farm.*** A joint venture has been created between AREG and AMEC Wind to determine the feasibility of building an offshore wind farm in the sea off Aberdeen. This would run north from Aberdeen Bay towards Newburgh, with turbines located between 1 and 2 km offshore. While the number and size of the turbines have yet to be decided, if the project was built at the upper end of the range under consideration, it would generate sufficient electricity to power half the homes in Aberdeen and Aberdeenshire.

The joint venture is now commencing a programme of 18 months of feasibility studies, which will hopefully lead to seeking Scottish Executive consent to construct the project. These studies will address: environmental issues, including birds and dolphins; maritime safety issues; aviation safety issues; foundation and other design aspects;

- (b) **Energy Futures Centre.** As part of its Master Plan Study for the Aberdeen Beach area, Aberdeen City Council is working with AREG to develop a high-profile new building on the Aberdeen sea-front – the Energy Futures Centre. This building will be of striking architecture and be of sustainable design. It will have a combination of commercial space for energy companies and organisations, and public visitor space to showcase the capabilities and potential of Aberdeen in the energy sector. This latter role has attracted assistance from the Scottish Executive, who support the role that the building will play nationally to promote the development of renewable energy. The Energy Futures Centre will also be a building of national significance for the demonstration of Scotland's pre-eminence in energy and a focus for winning new business and inward investment;
- (c) **Aberdeen Chair of Energy Futures.** A new joint Chair has been established between Aberdeen's two universities, on the subject of Energy Futures. The Chair will be supported by a new research team, and much will work specifically on renewables. The process of recruiting the new Chair is now well under way;
- (d) **Biomass.** The area around Aberdeen possesses significant forestry and farming resources which could and should be deployed as renewable fuels. AREG is actively developing a strategy on this subject, involving the creation of biomass fuel from forestry sources, the provision of a market for biomass fuel in Aberdeen City, and the potential for using arable crops (oil seed rape) in Aberdeenshire to make biodiesel for use as a transport fuel;
- (e) **Aberdeen and Aberdeenshire buildings.** Progressively, AREG aspires to move to a position where the first assumption for new buildings in this region is for them to be powered and heated by renewable means;
- (f) **All Energy Conference.** In May 2005, Aberdeen hosted the fifth All Energy Conference, which is the largest renewable energy event in the UK. The event once again saw record attendance, both in terms of visitors and exhibitors. The number of overseas visitors on this occasion was particularly enhanced by the World Renewable Energy Congress (WREC) which convened at the Exhibition Centre at the same time as All Energy. Plans are already being developed for further development of the event in 2006 and beyond. We hope that the combination of commercial and academic interests achieved during this week can be repeated in future years;

- (g) ***Energy Intermediate Technology Institute (ITI)***. AREG is working with Scottish Enterprise's Aberdeen-based Energy ITI to explore how the two organisations can work jointly on projects to mutual benefit.

AREG views on renewable policy issues

The existence of AREG implies a number of views which are relevant to the questions posed by the Royal Society of Edinburgh Inquiry:

- (a) we support the Scottish Executive targets for renewable energy for 2010 and 2020. We believe that they are achievable, while noting that efforts must be sustained on both securing planning agreements for projects, and reinforcing the capacity of the Scottish electricity transmission system;
- (b) we see no reason for Scotland to limit its renewable energy aspirations to the current 2020 target. The wealth of renewable resources in Scotland mean that higher levels of renewables deployment could and should be planned;
- (c) there can be no doubt that wind energy – both onshore and offshore – will be the key technology to meet the Government's 2010 renewables target. In the second decade, offshore wind will become prevalent, although continued growth in onshore wind generation will be necessary. In that decade, biomass and marine renewables will make increasing contributions to renewable generation. Scotland can draw significant benefits from both biomass and marine renewables, in addition to its wind resources.
- (d) As a global player in the energy industry, Scotland can also draw significant economic benefit from participating in the global renewable energy industry

Conclusion

AREG believes that Aberdeen and its surrounding area can make an important contribution to renewables development in the UK. It can deploy the expertise derived from its oil/gas history to assist national targets on renewable energy. At the same time this will secure economic and environmental benefits for the city and region.